

# SENIOR AND SUPERVISING TELECOMMUNICATIONS ENGINEER

Agency Code: 7500 Class Code: 3637 Exam Code: 0PB41

This multi-level examination is for:

7500-3637-0PB41 SENIOR TELECOMMUNICATIONS ENGINEER 7500-3636-0PB41 SUPERVISING TELECOMMUNICATIONS ENGINEER

Department(s):	State Personnel Board/Statewide
Opening Date:	12/30/2010 1:32:00 PM
Closing Date:	Continuous
Cut-off Date:	10/15/2015
Type of Examination:	SERVICEWIDE OPEN
Salary:	MONTHLY-RANGED-SALARY - \$7,726.00 to \$10,324.00
Employment Type:	Permanent Full-time Permanent Part-time Permanent Intermittent Limited Term Full-time Limited Term Part-Time Limited Term Intermittent
Exam Type:	State-wide

## **EEO**

An equal opportunity employer to all regardless of race, color, creed, national origin, ancestry, sex, marital status, disability, religious or political affiliation, age, or sexual orientation. An equal opportunity employer to all regardless of race, color, creed, national origin, ancestry, sex, marital status, disability, religious or political affiliation, age, or sexual orientation.

# DRUG FREE STATEMENT

It is an objective of the State of California to achieve a drug-free State work place. Any applicant for State employment will be expected to behave in accordance with this objective, because the use of illegal drugs is inconsistent with the law of the State, the rules governing civil service, and the special trust placed in public servants.

## WHO SHOULD APPLY?

Candidates who meet the minimum qualifications as stated below may apply for this examination at any time. Once you have taken the examination, you may not reapply for six (6) months. All applicants must meet the education and/or experience requirements as stated on this examination announcement.

## FILING INSTRUCTIONS

Final File Date: Continuous

Where to Apply: Click the link at the bottom of this bulletin.

## **SPECIAL TESTING ARRANGEMENTS**

If you have a disability and need special assistance or special testing arrangements, contact the State Personnel Board, Examinations Unit at (866) 844-8671, TTY (916) 654-6336, or via the California Relay Service for the Deaf or Hard of Hearing at (800) 735-2929 from TTY Phones, or at (800) 735-2922 from voice phones.

## **SALARY INFORMATION**

Salary:

Senior Telecommunications Engineer \$7726.00 - \$9389.00

Supervising Telecommunications Engineer \$8,942.00 -\$10,324.00

## **ELIGIBLE LIST INFORMATION**

An OPEN, MERGED eligible list will be established by the State of California. The names of successful competitors will be merged onto the eligible list in order of final scores regardless of test date. Eligibility expires 12 months after it is established. Competitors must then retake the Training and Experience Evaluation to reestablish eligibility.

## MINIMUM QUALIFICATIONS

## SENIOR TELECOMMUNCIATIONS ENGINEER

Either I

Two years of experience performing the duties of an Associate Telecommunications Engineer.

Or II

Five years of engineering experience in the field of telecommunications which must have included three years in the design, construction, or maintenance of radio communications systems or wire communications systems.

And

Education: Candidates applying under non-State requirements must meet the following education requirements: Equivalent to graduation from college with major work in electrical, electronic, or communications engineering. (Additional qualifying experience may be substituted for the required education on a year-for-year basis.) (A Master's Degree in Electrical Engineering with specialization in electronics or communications may be substituted for the required experience for Assistant Telecommunications Engineer. Applicants who are pursuing graduate work toward a master's degree will be admitted to the examination, but they must receive the degree before they will be considered for appointment.)

## SUPERVISING TELECOMMUNICATIONS ENGINEER

### Either I

Two years of experience performing the duties of a Senior Telecommunications Engineer.

### Or II

Broad and extensive experience (more than five years) in telecommunications planning and design, at least two years of which shall have involved the supervision of subordinates in the design, construction, operation or maintenance of major telecommunications systems.

#### And

Education: Candidates applying under non-State requirements must meet the following education requirements: Equivalent to graduation from college with major work in electrical, electronic, or communications engineering. (Additional qualifying experience may be substituted for the required education on a year-for-year basis.) (A Master's Degree in Electrical Engineering with specialization in electronics or communications may be substituted for the required experience for Assistant Telecommunications Engineer. Applicants who are pursuing graduate work toward a master's degree will be admitted to the examination, but they must receive the degree before they will be considered for appointment.)

## POSITION DESCRIPTION

Senior Telecommunications Engineer

This is the first supervisory level of the series. Under general direction, incumbents plan and direct the work of a staff in an assigned program area; or as a non supervisor, make telecommunication engineering surveys and studies of major statewide importance.

Supervising Telecommunications Engineer

This is the second level supervisor and program manager level of the series; under general direction of the Division Chief, incumbents plan, organize and direct the work of major program area. This level is responsible for work of the highest level technical and professional engineering expertise performed in the division. As assigned, incumbents represent the division on departmental, agency or interagency committees or task forces. When assigned, incumbents act for the Chief in his/her absence.

## **EXAMINATION INFORMATION**

Training and Experience Examination-Weighted 100%

This examination will consist of a Training and Experience Examination weighted 100%. In order to obtain a position on the eligible list, a minimum of 70% must be obtained.

## **KNOWLEDGE AND ABILITIES**

### Senior and Supervising Telecommunications Engineer:

#### **Knowledge of:**

- The theory and principles of telecommunications and electronics for the installation, maintenance, modification, and repair of equipment and systems.
- 2. The design, uses, and functions of telecommunication systems and equipment (e.g., wireline, radio, fiber, satellite, data communications, telephone systems) in order to perform essential work functions.
- 3. The principles, practices, methods, terminology and trends in telecommunication systems engineering.
- 4. Engineering economics to determine whether proposals are economically feasible.
- 5. Leadership practices and motivational techniques to maintain a productive work environment.

### Ability to:

- 1. Apply the theory and principles of telecommunications and electronics for the installation, maintenance, modification, and repair of equipment and systems.
- 2. Maintain confidentiality to ensure compliance with applicable laws, regulations, and rules.
- 3. Interpret and apply provisions of State and federal rules and regulations affecting the design, implementation, and operation of telecommunications systems.
- 4. Identify and analyze functional and operational requirements and to develop solutions that satisfy end user telecommunication needs.
- 5. Effectively manage changes in scope, schedule and/or resources for a telecommunications project or task.
- 6. Write clearly and concisely using proper spelling, grammar, syntax and sentence structure.
- 7. Verbally communicate information and ideas so others will understand.
- 8. Write technical reports to communicate complex information to various audiences.
- 9. Effectively communicate in front of groups to facilitate an open exchange of ideas.

### Additional Knowledge and Abilities for Supervising Telecommunications Engineer:

### **Knowledge of:**

- 1. Frequency spectrum allocations to effectively design telecommunication systems.
- 2. The field of electromagnetic wave propagation to effectively design and test telecommunications systems.
- 3. The budget principle as applied to the management of projects, programs, and organizations.
- 4. Available State personnel resources (e.g., Employee Assistance Program, collective bargaining agreements, steps of Progressive Discipline) to assist in the management of State personnel.

- 5. Procurement and contracting requirements in accordance with the State Administrative Manual to ensure compliance.
- 6. Available resources to assist in the procurement and contracting of goods and services used in telecommunication systems.

### Ability to:

- 1. Apply change control processes and procedures to ensure system integrity and minimize service disruptions.
- 2. Understand any apply State requirements for the procurement and contracting of goods and services used in telecommunication systems.
- 3. Assess and identify staff training needs to improve staff competency and productivity.
- 4. Develop work plans and other project management documents to monitor work projects.
- 5. Monitor and control the scope, schedule and resources of telecommunication projects to ensure successful completion.
- 6. Apply appropriate managerial techniques to ensure effective supervision of assigned staff.

## BENEFITS

To learn more about the comprehensive benefit package please visit our website at http://www.calpers.gov

## **VETERANS PREFERENCE**

Veterans' Preference credits will not be granted in the examination as it does not meet the requirements to qualify for Veterans' Preference credit.

## **CAREER CREDITS**

Career credits will not be added to the final score of this examination.

## CONTACT INFORMATION

State Personnel Board 801 Capitol Mall Sacramento, CA 95814 (866) 844-8671

## DISCLAIMER

Please click on the link below to review the official California State Personnel Board class specification:

http://spb.ca.gov/jobs/resources/jobspecs.htm

## **GENERAL INFORMATION**

If you meet the requirements stated on this examination bulletin, you may take this examination, which is competitive. Possession of the entrance requirements does not assure a place on the eligible list. You

performance in the examination described on this bulletin will be rated against a predetermined job-related rating, and all candidates who pass will be ranked according to their scores.

The State Personnel Board reserves the right to revise the examination plan to better meet the needs of the service, if the circumstances under which this examination was planned change. Such revision will be in accordance with civil service laws and rules and all competitors will be notified.

Candidates needing special testing arrangements due to a disability must mark the appropriate box on the application and contact the testing department.

General Qualifications: Candidates must possess essential personal qualifications including integrity, initiative, dependability, good judgment, and ability to work cooperatively with others; and a state of health consistent with the ability to perform the assigned duties of the class. A medical examination may be required. In open examinations, investigation may be made of employment records and personal history and fingerprinting may be required.

Eligible Lists: Eligible lists established by competitive examination, regardless of date, must be used in the following order: 1) sub-divisional promotional, 2) departmental promotional, 3) multi-departmental promotional, 4) service-wide promotional, 5) departmental open, 6) open. When there are two lists of the same kind, the older must be used first. Eligible lists will expire in one to four years unless otherwise stated on the bulletin.

Veterans' Preference Points: California Law (Government Code 18971-18978) allows the granting of Veterans' Preference Points in open entrance and open, non-promotional entrance examinations. Veterans' Preference Points will be added to the final score of all competitors who are successful in these types of examinations, and who qualify for, and have requested by mail, these points. In open (only) entrance examinations, Veterans' Preference Points are granted as follows: 10 points for veterans, widows and widowers of veterans, and spouses of 100% disabled veterans (5 points for widows, widowers, and spouses if the veteran was in the National Guard); and 15 points for disabled veterans. In open, non-promotional entrance examinations, Veterans' Preference Points are granted as follows: 10 points for veterans, and 15 points for disabled veterans. Employees who have achieved permanent State civil service status are not eligible to receive Veterans' Preference Points. "Permanent State civil service status" means the status of an employee who is lawfully retained in his/her position after completion of the applicable probationary period. This includes permanent intermittent, part-time, and full-time appointments. In addition, individuals who at any time achieved permanent State civil service status and subsequently resigned, or were dismissed from State civil service are not eligible to receive Veterans' Preference Points. Veteran status is verified by the State Personnel Board (SPB). Directions to apply for Veterans' Preference Points are on the Veterans' Preference Application (Std. Form 1093), which is available at www.spb.ca.gov or from the State Personnel Board, 801 Capitol Mall, Sacramento, CA 95814, and the Department of Veterans Affairs.

Career Credits: Career credits will not be granted in this Senior and Supervising Telecommunications Engineer series examination as it does not meet the requirements to qualify for Career Credits.

### **TAKING THE EXAM**

When you click the link below, you will be directed to the Training and Experience Evaluation. At the end of the Training and Experience Evaluation, it will be instantly scored.

Click here to take the examination